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PTO/SB/08A (10-01)

Approved for use through 10/31/2002. OMB 0651-0031
H.S. Form 1417 (Rev. 12-9-97) U.S. GOVERNMENT PRINTING OFFICE: 1998 50-500-000-000

Substitute for form 1449A/PTO

INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(use as many sheets as necessary)

Sheet 1 of 4

Complete if Known

Application Number	09/633,633
Filing Date	August 7, 2000
First Named Inventor	Brown et al
Art Unit	2124
Examiner Name	Chavis
Attorney Docket Number	ROYG-1-1001

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8 Catts
10-21-83

U.S. PATENT DOCUMENTS

10/13/2003
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✓ 203
✓ 203 OCT 08 2003

Technology Center 2100

FOREIGN PATENT DOCUMENTS

Examiner
Signature

Chas. G. F.

Date
Considered

10-29-83

***EXAMINER:** Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹ Applicant's unique citation designation number (optional). ² See *Kinds Codes of USPTO Patent Documents* at www.uspto.gov or MPEP 901.04. ³ Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵ Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. ⁶ Applicant is to place a check mark here if English language Translation is attached.

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, DC 20231.



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INFORMATION DISCLOSURE STATEMENT BY APPLICANT

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Sheet 2 of 4

Complete if Known

Application Number	09/633,633
Filing Date	August 7, 2000
First Named Inventor	Brown et al.
Group Art Unit	2124
Examiner Name	Chavis
Attorney Docket Number	ROYG-1-1001

OTHER PRIOR ART – NON PATENT LITERATURE DOCUMENTS

Examiner Initials	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published	T ²
	059	BRADLEY BARGEN and PETER DONNELLY; Inside Direct X – In Depth Techniques for Developing High-Performance Multimedia Applications; 1988; Chapters 1, 18, 19, 20, and 22-27; Microsoft Press; U.S.	
	060	PETER KOVACH; Inside Direct3D – The Definitive Guide for Real-Time 3D Power and Performance for Microsoft Windows; 2000; Chapters 1, 7, and 15; Microsoft Press; U.S.	
	061	M. FARSI and M. BARBOSA; CANopen Implementation - Applications to Industrial Networks; 2000; Chapters 1, 2 and 3; Research Studies Press Ltd.; England and U.S.	
	062	WOLFHARD LAWRENZ; CAN System Engineering – From Theory to Practical Applications; 1997; Chapters 1, 2.1, 2.2, 3.2 and 4.1; Springer-Verlag New York, Inc.; U.S.	
	063	ALLEN-BRADLEY; CNCnet Software Library; October, 1992; Publication 8000-6.1.1; U.S.	
	064	ROBERT BOSCH GmbH; CAN Specification; September, 1991; Version 2.0.	
	065	SISCO, INC.; Overview and Introduction to the Manufacturing Message Specification (MMS); 1994-1995; Revision 2; Systems Integration Specialists Company, Inc.; Sterling Heights, Michigan, U.S.	
	066	ISO-9506-1 Industrial Automation Systems—Manufacturing Message Specification—Part 1: Service definition; August, 2000; pp. i-22; ISO/IEC; Switzerland.	
	067	ISO-9506-2 Industrial Automation Systems—Manufacturing Message Specification—Part 2: Protocol specification; August, 2000; pp. i-6; ISO/IEC; Switzerland.	
	068	SISCO, INC.; MMS-EASE; January, 1996; Systems Integration Specialists Company, Inc.; Sterling Heights, Michigan, U.S.	OCT 08 2003
	069	ANSI/EIA-484-A Electrical and Mechanical Interface Characteristics and Line Control Protocol Using Communication Control Characters for Serial Data Link Between a Direct Numerical Control System and Numerical Control Equipment Employing Asynchronous Full Duplex Transmission; June, 1995; Electronic Industries Association; U.S.	Technology Center 2100

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PTO/SB/088 (10-01)

Substitute for form 1449B/PTO

INFORMATION DISCLOSURE STATEMENT BY APPLICANT

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Sheet

3 of 4

Complete if Known

Application Number	09/633,633
Filing Date	August 7, 2000
First Named Inventor	Brown et al.
Group Art Unit	2124
Examiner Name	Chavis
Attorney Docket Number	ROYG-1-1001

OTHER PRIOR ART – NON PATENT LITERATURE DOCUMENTS

Examiner Initials ¹	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published	T ²
<i>Ch</i>	070	ISO/IEC 7498-1 Information Technology—Open Systems Interconnection-Basic Reference Model: The Basic Model; November, 1994; U.S.	
<i>Ch</i>	071	ISO/IEC 7498-3 Information Technology—Open Systems Interconnection-Basic Reference Model: Naming and Addressing; April, 1997; U.S.	
<i>Ch</i>	072	TODD J. SCHUETT; The Benefits and Data Bottlenecks of High Speed Milling; August, 1995; Conference Paper Presented at Southeastern Michigan Chapter American Mold Builders Association; Creative Technology Corporation; U.S.	
<i>Ch</i>	073	TODD J. SCHUETT; "The Ultimate DNC; Direct CNC Networking (DCN)"; Modern Machine Shop; January, 1996; Creative Technology Corporation; U.S.	
<i>Ch</i>	074	TODD J. SCHUETT; Advanced Controls for High Speed Milling; Conference Paper Presented at the SME "High Speed Machining"; May 7-8, 1996; Creative Technology Corporation; U.S.	
<i>Ch</i>	075	LEITAO, MACHADO & LOPES; "A Manufacturing Cell Integration Solution"; Paper Developed at CCP as a Part of the ESPRIT 5629 Project; October, 1995.	
<i>Ch</i>	076	MITSUBISHI ELECTRIC; Mitsubishi Electric Advance: Programmable Logic Controllers Edition; September, 1996; Vol. 76; Mitsubishi Electric Corporation; Tokyo.	
<i>Ch</i>	077	FARSI, M.; "Flexible and Reliable Robotics Cells in Factory Automation"; Proceedings of the IEEE International Conference on Systems, Man and Cybernetics, France; 1993; pp. 520-525.	
<i>Ch</i>	078	CHU & WANG; "Development of a Practical SFC System for CNC Machine Shop"; International Conference on Data and Knowledge Systems for Manufacturing and Engineering; May 1994; pp. 362-367, Vol. 1; pp. xx+745, Vol. 2.; Chinese Univ.; Hong Kong.	
<i>Ch</i>	079	FARSI, M.; "Device Communication for Flexible Manufacturing:-A New Concept"; Ninth International Conference on System Engineering, U.K.; 1994; pp. 328-334.	
<i>Ch</i>	080	FARSI, M.; "A Production Cell Communication Model in Factory Automation Using the Controller Area Network"; Proceedings of XII International Conference on Systems Science, Poland; 1995; pp. 90-95.	

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Signature

Chavis, G. d.

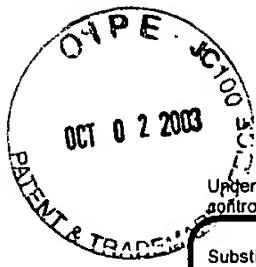
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PTO/SB/08B (10-01)

Substitute for form 1449B/PTO

INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(use as many sheets as necessary)

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4 of 4

Complete if Known

Application Number 09/633,633

Filing Date August 7, 2000

First Named Inventor **Brown et al.**

Group Art Unit 2124

Examiner Name Chavis

Attorney Docket Number ROYG-1-100

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PATENT LITERATURE DOCUMENTS

LETTERS), title of the article (when appropriate), title of the

, symposium, catalog, etc.), date, page(s), volume-issue

OTHER PRIOR ART – NON PATENT LITERATURE DOCUMENTS

Examiner Signature	Chas. G. S.	Date Considered	10-29-03
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FORM PTO-1449 (REV 7-88)	DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE	ATTY. DOCKET NO. ROYG-1-1001	APPLICATION NO. 09/633,633
INFORMATION DISCLOSURE STATEMENT DEC 1 4 2000 (Use several sheets if necessary)		APPLICANTS BROWN et al.	# 2
		FILING DATE August 7, 2000	GROUP ART UNIT 2762 2124

U.S. PATENT DOCUMENTS

*EXAMINER INITIAL		DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE
Not Provided	U1	5,691,897	11/25/97	Brown et al.	364	167.01	
"	U2	5,608,894	03/04/97	Kawakami et al.	395	500	
"	U3	5,604,843	02/18/97	Shaw et al.	395	101	
"	U4	5,491,813	02/13/96	Bondy et al.	395	500	
"	US	5,453,933	09/26/95	Wright et al.	364	474.23	
"	U6	5,390,330	02/14/95	Talati	395	703	
"	U7	5,247,650	09/21/93	Judd et al.	395	500	
"	U8	5,126,932	06/30/92	Wolfson et al.	395	200.32	
"	U9	5,175,817	12/29/92	Adams et al.	395		
"	U10	5,245,703	09/14/93	Hubert	395		
"	U11	4,937,737	06/26/90	Schwane et al.	364		

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		DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUBCLASS	TRANSLATION	
							YES	NO
Cited in Paper #5	F1	0275826-A1	07/27/88	European Pat. Off.	G05B	19/00		
"	F2	0442676-A2	08/21/91	European Pat. Off.	G06E	0/44		
"	F3	WO 9507504	03/16/95	WIPO	G05B	19/414		
"	F4							
"	F5							

OTHER PRIOR ART (Including Author, Title, Date, Pertinent Pages, Etc.)

incomplete - No Author or source. Also, not provided	O1	WO93-25826-A1 WOSA Backgrounder: Delivering Enterprise Services to the Windows-based Desktop, July-1993, Microsoft Development Library.
"	O2	WOSA INSIDE WINDOWS 95, pp. 348-351
"	O3	Software Products for Industrial Automation, IGENICS WEB 3.0 Product Brochure, Trihedral/Engineering Ltd. (1994)

EXAMINER	DATE CONSIDERED
Charles, G. P.	6-26-03

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FORM PTO-1449 (REV.7-80)	U.S. DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE		ATTY. DOCKET NO. ROYG-1-1001	APPLICATION NO. 09/633,633
INFORMATION DISCLOSURE STATEMENT <i>(Use several sheets if necessary)</i>		APPLICANTS BROWN et al.		
		FILING DATE August 7, 2000	GROUP ART UNIT 2762 2124	

U.S. PATENT DOCUMENTS

*EXAMINER INITIAL		DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE
<i>Prin. 1d</i>	U12	5,095,445	03/10/92	Sekiguchi	364		
u	U13	4,531,182	07/23/85	Hyatt	364	131	
u	U14	3,673,455	6/1972	Dewey	317	29-R	
u	U15	4,589,074	5/1986	Thomas et al.	364	483	
u	U16	4,672,555	6/1987	Hart et al.	364	483	
u	U17	4,695,792	9/1987	Roy	324	83-D	
u	U18	4,709,339	11/1987	Fernandes	364	492	
u	U19	4,983,955	1/1991	Ham, Jr. et al.	340	664	
u	U20	5,182,547	1/1993	Griffith	340	664	
u	U21	5,224,006	6/1993	MacKenzie et al.	361	45	
u	U22	5,224,054	6/1993	Wallis	364	483	

FO8/1993REIGN PATENT DOCUMENTS364

		DOCUMENT NUMBER	DATE&	COUNTRY	CLASS	SUBCLASS	TRANSLATION	
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OTHER PRIOR ART (Including Author, Title, Date, Pertinent Pages, Etc.)

<i>Incomplete and Not Provided</i>	O4	The Complete Computer-Based Automation Tool (IGSS)-Seven Technologies A/S.
	O5	Oregon Micro Systems Product Guide
	O6	AIMAX-WIN Product Brochure, T-A Engineering Co., Inc.

EXAMINER	DATE CONSIDERED
<i>Chen, S. P.</i>	6-26-03

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FORM PTO-1449
(REV.7-80)U.S. DEPARTMENT OF COMMERCE
PATENT AND TRADEMARK OFFICEATTY. DOCKET NO.
ROYG-1-1001APPLICATION NO.
09/633,633

INFORMATION DISCLOSURE STATEMENT

(Use several sheets if necessary)

APPLICANTS
BROWN et al.FILING DATE
August 7, 2000GROUP ART UNIT
2762 2124

U.S. PATENT DOCUMENTS

*EXAMINER INITIAL		DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE
N	+	U23 5,233,538	8/1993	Wallis	364	483	
H		U24 5,343,404	8/1994	Girgis	364	484	
H		U25 5,414,635	5/1995	Ohta	364	481	
H		U26 5,487,016	1/1996	Elms	364	484	
H		U27 5,490,086	2/1996	Leone et al.	364	492	
H		U28 5,587,917	12/1996	Elms	364	487	
		U29					
		U30					
		U31					
		U32					
		U33					

FOREIGN PATENT DOCUMENTS

		DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUBCLASS	TRANSLATION	
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	F							
	F							

OTHER PRIOR ART (Including Author, Title, Date, Pertinent Pages, Etc.)

incomplete and not provided	O7	XANALOG-Model-NL-SIM-Product-Brochure, XANALOG
H	O8	ExperTune-PID Tuning Software, Gerry Engineering Software
H	O9	P.MAC-Product Catalog, P-43

EXAMINER

Chen, Jr. C.

DATE CONSIDERED

6-26-03

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(REV.7-80)U.S. DEPARTMENT OF COMMERCE
PATENT AND TRADEMARK OFFICEATTY. DOCKET NO.
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09/633,633

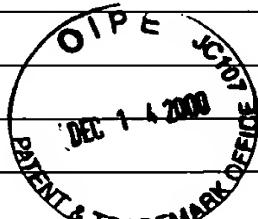
INFORMATION DISCLOSURE STATEMENT

(Use several sheets if necessary)

APPLICANTS
BROWN et al.FILING DATE
August 7, 2000GROUP ART UNIT
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U.S. PATENT DOCUMENTS

*EXAMINER INITIAL		DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE
	U34						
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OTHER PRIOR ART (Including Author, Title, Date, Pertinent Pages, Etc.)

incomplete and not provided	10	Paragon TNT Product Brochure, Intec Controls Corp.
"	11	Aerotech Motion Control Product Guide, pp. 233-234
"	12	OpenBatch Product Brief, PID Inc.

EXAMINER

Chen, J. P.

DATE CONSIDERED

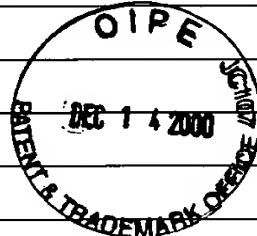
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OTHER PRIOR ART (Including Author, Title, Date, Pertinent Pages, Etc.)

incomplete and not provided	13	PC/DSP-Series-Motion-Controller-Programming-Guide.
17	14	ELX-Product-Brochure; Intellution (1994) -->
18	15	Precision Motion Controls Product Guide, P-17-->

EXAMINER *Chas. G. P.* DATE CONSIDERED *6-26-03*

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							YES	NO
	F							
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	F							

OTHER PRIOR ART (*Including Author, Title, Date, Pertinent Pages, Etc.*)

16	Compumotor-Digiplan 1993-1994 catalog, pp. 10-11.
17	
18	

EXAMINER <i>Cham, J. D.</i>	DATE CONSIDERED 6-26-83
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